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**PHOTOGRAPHIC
INTERPRETATION
REPORT**

**NATIONAL PHOTOGRAPHIC
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**COASTAL DEFENSE ACTIVITY, SHANTUNG
PROVINCE, CHINA**

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COASTAL DEFENSE ACTIVITY, SHANTUNG PROVINCE, CHINA

ABSTRACT

1. This report reviews coastal defense activity observed in Shantung Province, China, on photography from mid-1971 through early 1973. It consists of text, a map, a table, and annotated photographs.

INTRODUCTION

2. Shantung Province is in northeast China, on the Yellow Sea (Figure 1). The Shantung Peninsula coastal defense (CD) network protects the Po Hai (Gulf of Chihli) including the port city of Tang-ku in adjacent Hopeh Province, the major seaport for the Peking/Tien-ching (Tientsin) region.

3. This report provides a summary of CD developments in Shantung Province observed on photography between June--July 1971 [] and January 1973 []. Table 1, which is keyed to Figure 1, lists the 74 identified CD sites and support facilities with data on weapons, firing positions, tunnels, and geographic locations. Figures 2 through 5 illustrate various types of CD facilities in Shantung Province.

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BASIC DESCRIPTION

Placement and Types of Sites

4. The CD sites and posts of Shantung Province have been positioned for maximum protection. Site placement allows for overlapping areas of artillery fire (Figure 1). The field artillery at CD posts can be rapidly deployed as needed, and sites with fixed firing positions have been constructed on hillsides, cliffs, ridgelines, and on islands. Two general types of firing positions are associated with CD sites: soft positions and hard positions.

5. Four types of soft positions have been observed in Shantung. The simplest is the field deployed position which consists of a flat unimproved area where a weapon may be positioned for firing. A second type consists of a large graded area, usually rectangular, on a hillside or in brush where several weapons may be positioned for firing. A third type is a small graded area where a single weapon may be placed. The fourth type is the same as the third with the addition of an earthen revetment.

6. Four types of hard positions have also been seen in Shantung. One consists of an earth-covered bunker with a firing port facing the sea. A second is a single concrete hardstand with an earthen revetment. A third type consists of a concrete strip (sometimes with rails) with a hardstand at the end (Figure 2). The fourth type of hard position is the concrete casement. These are usually located on a hilltop and consist of a concrete keyhole-shaped single firing position.

7. Most of the CD sites in Shantung Province consist of interconnected networks of defenses. The firing positions are backed by tunnels, antiaircraft artillery (AAA) defenses are within the sites or nearby, and personnel trenches connect AAA positions and form additional lines of defense.

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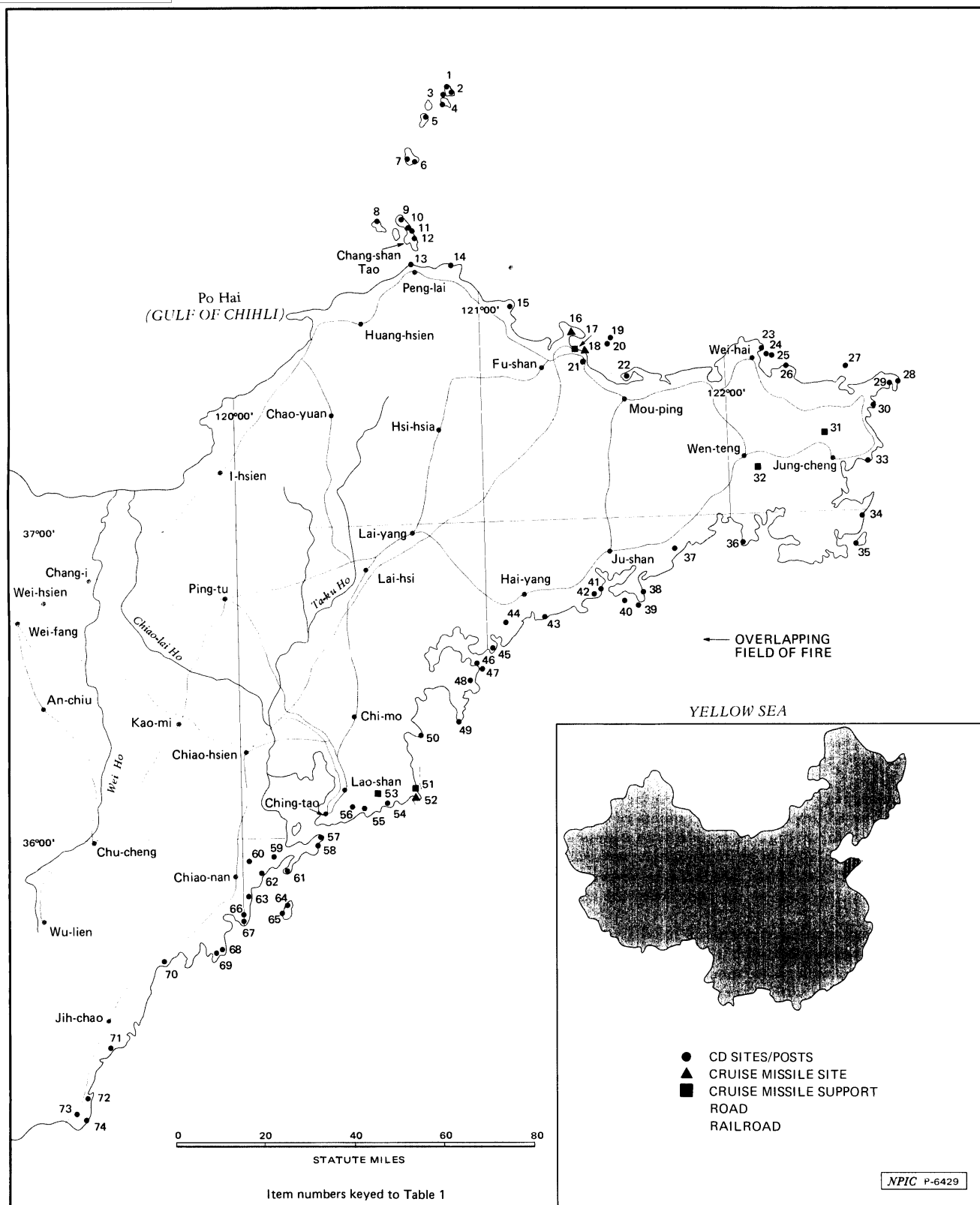
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FIGURE 1. MAP OF SHANTUNG PROVINCE SHOWING PLACEMENT OF COASTAL DEFENSE SITES

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25X1Table 1. Coastal Defense Sites, Shantung Province, China
(Items keyed to Figure 1)

Item	Name, BE Number, and Coordinates	Weapons	Firing Positions	Tunnel Entrances	Remarks
1	Pei-cheng-huang Tao CD site 2 38-24-00N 120-54-40E	Four 122-mm howitzers	4	3	
2	Pei-cheng-huang Tao CD Site 38-23-20N 120-55-20E	Six 100-mm field artillery	8		Two 4-position sites
3	Nan-cheng-huang Tao CD Site 4 38-22-18N 120-54-20E	Four 100-mm field artillery	8	2	4-position site NE shore; 2-position site northern ridge; 2-position site western ridge
4	Nan-cheng-huang Tao CD Site 38-20-55N 120-54-35E	Four 100-mm field artillery	13	4	4 tunnels connect 8 firing positions; 2-position site NW coast; 3 rough positions NW coast
5	Ta-chin Tao Possible CD Site 38-18-40N 120-49-39E	Unknown	6	9	Firing positions have low concrete walls; weapons system not determined
6	To-chi Tao CD Site 38-09-45N 120-46-40E	4 field artillery	4	4	
7	To-chi Tao CD Site 2 38-10-05N 120-44-40E	4 field artillery	4	8	8 tunnel entrances appear to serve 4 through tunnels
8	Ta-hei-shan Tao CD Site 1 37-59-05N 120-36-35E	4 field artillery	3	4	
9	Pei-chang-shan Tao CD Site 1 37-59-50N 120-42-50E	8 field artillery	6	12	
10	Chang-shan Tao CD Site 37-57-20N 120-44-50E	Six 122-mm howitzers	6	8	6 tunnel entrances backing guns appear to connect to 2 prob through tunnels
11	Chang-shan Tao CD Site 3 37-57-05N 120-44-12E	One 122-mm howitzer	2	3	One through tunnel
12	Chang-shan Tao CD Site 1 37-56-05N 120-44-45E	Six 100-mm field artillery	25	25	7 sites; all firing positions connected by through tunnels
13	Peng-lai CD Site 2 37-50-00N 120-44-43E	Two 100-mm field artillery	8	8	4 tunnels connect 8 firing positions
14	Peng-lai CD Position 37-49-05N 120-54-45E	3 field artillery	4	4	

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Table 1. (Continued)

Item	Name, BE Number, and Coordinates	Weapons	Firing Positions	Tunnel Entrances	Remarks	
15	Chu-chia CD Site 1 [redacted] 37-42-20N 121-06-47E	Unknown	2	5	Firing positions revetted; weapons system not observed	25X1
16	Yen-tai CD Site CM TSR [redacted] 37-36-52N 121-23-11E	4 SAMLET launchers	4	4	STYX crates reported in support area	25X1
17	Yen-tai Cruise Missile Support Fac [redacted] 37-32-07N 121-24-50E	--	--	--	Cruise missile equipment stored & maintained in paved parking area	25X1
18	Yen-tai CD Site 2 CM TSR [redacted] 37-32-05N 121-25-45E	8 STYX launchers	4	--	STYX launchers in adjacent support area	25X1
19	Kung-tung Tao CD Site 2 [redacted] 37-33-45N 121-30-30E	4 field artillery	4	2	Firing positions masonry revetted	25X1
20	Kung-tung Tao CD Site 1 [redacted] 37-33-50N 121-30-50E	Two 130-mm field artillery	2	--		25X1
21	Yen-tai CD Artillery Site [redacted] 37-30-55N 121-25-35E	6 field artillery	10	--	Firing positions revetted	25X1
22	Yang-ma Tao CD Site 1 [redacted] 37-27-20N 121-35-05E	Four 122-mm howitzers	10	15	Firing positions revetted	25X1
23	Wei-hai CD Site 1 [redacted] 37-31-20N 122-09-20E	4 field artillery	5	--		25X1
24	Liu-kung Tao CD Area [redacted] 37-30-00N 122-10-20E	Eight 100-mm field artillery	15	12	4 firing positions hardened & connected by single tunnel	25X1
25	Liu-kung Tao CD Site [redacted] 37-29-55N 122-12-20E	4 field artillery	4	1	Firing positions appear to be connected by single tunnel	25X1
26	Chang-feng-chai CD Site [redacted] 37-27-35N 122-15-10E	4 field artillery	4	--	Firing positions hardened casements	25X1
27	Chi-ming Tao CD Site 1 [redacted] 37-27-05N 122-29-50E	4 field artillery	4	--		25X1
28	Lung-hsu Tao CD Site [redacted] 37-23-40N 122-42-00E	4 field artillery	4	4		25X1

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Table 1. (Continued)

Item	Name, BE Number, and Coordinates	Weapons	Firing Positions	Tunnel Entrances	Remarks	
29	Lung-hsu Tao CD Site 2 [redacted] 37-23-40N 122-40-00E	Unknown	4	8	Each firing position backed by through tunnel; weapons system not observed	25X1
30	Chih-jung-cheng Probable CD Positions [redacted] 37-19-48N 122-35-10E	4 field artillery	4	4	Artillery pieces observed in support area	25X1
31	Wei-hai Cruise Missile Support Fac [redacted] 37-17-03N 122-23-20E	--	--	--	Cruise missile launchers observed	25X1
32	Wen-teng Cruise Missile Support Fac [redacted] 37-08-57N 122-06-50E	--	--	--	Cruise missile launchers observed	25X1
33	Jung-cheng CD Site [redacted] 37-09-40N 122-34-15E	Four 130-mm field artillery	4	4	FA pieces parked at support area	25X1
34	Ning-ching-so CD Post [redacted] 36-59-20N 122-30-42E	6 field artillery	--	--		25X1
35	Mo-yeh Tao CD Site [redacted] 36-53-38N 122-29-30E	Unknown	4	--	Firing positions hardened; weapons system not observed	25X1
36	Chien Tao CD Post [redacted] 36-54-35N 122-02-30E	4 field artillery	--	--		25X1
37	Huang-tuan CD Post [redacted] 36-53-10N 121-45-40E	4 field artillery	--	--	No fixed firing positions associated with facility	25X1
38	Hai-yang-so CD Site [redacted] 36-45-40N 121-37-40E	4 field artillery	20	4	Firing positions grouped into five 4-position sites; artillery observed in tunnel entrances	25X1
39	Huang Tao CD Post [redacted] 36-43-15N 121-36-55E	4 field artillery	--	--	Several open firing positions near facility	25X1
40	Tu-chia Tao CD Site [redacted] 36-44-30N 121-33-20E	6 field artillery	4	4	Artillery observed in support area	25X1
41	Chao-chia CD Site [redacted] 36-46-40N 121-28-20E	3 field artillery	3	--		25X1
42	Hsin-chia CD Site [redacted] 36-45-40N 121-26-20E	4 field artillery	4	4		25X1

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Table 1. (Continued)

Item	Name, BE Number, and Coordinates	Weapons	Firing Positions	Tunnel Entrances	Remarks	
43	Chiu-hai-yang CD Site [redacted] 36-41-20N 121-14-20E	8 field artillery	8	--	Artillery positions earthen bunkers; 4 artillery pieces heavy & 4 light	25X1
44	Hai-vang CD Site 1 [redacted] 36-41-05N 121-05-20E	4 field artillery	6	--	Artillery observed in support area	25X1
45	Chao-li Storage Area [redacted] 36-35-40N 121-01-40E	Unknown	4	4	Weapons system not observed; facility being changed to CD site	25X1
46	Tien-chi CD Site 3 [redacted] 36-33-30N 120-57-40E	Unknown	3	2	Firing positions are long rectangular areas allowing random placement of weapons	25X1
47	Tien-chi CD Site 2 [redacted] 36-32-30N 120-58-30E	5 field artillery	5	2	One firing position is widened area cut into hillside	25X1
48	Tien-chi CD Site 1 [redacted] 36-30-30N 120-55-25E	Unknown	4	4	Weapons system not observed	25X1
49	Nu Tao CD Site [redacted] 36-22-10N 120-51-10E	Unknown	2	4	Weapons system not observed	25X1
50	Ao-shan-wei CD Site 1 [redacted] 36-20-08N 120-43-40E	4 field artillery	12	--	4 positions revetted; 4 positions ramp & bunker served	25X1
51	Shih Tao Naval Facility [redacted] 36-53-12N 122-25-19E	--	--	--	Facility supports Ching-shan PUG Naval Facility (BE 0381-01283) where poss land-based cruise missile equipment observed	25X1
52	Ching-shan CD Site CM TSR [redacted] 36-08-06N 120-41-30E	--	4	4	Missile equipment not observed at this site	25X1
53	Chiang-ko-chuang Naval Ammo Depot [redacted] 36-08-25N 120-31-40E	--	--	--	STYX cruise missile equipment observed	25X1
54	Chu-hsien-kung CD Post [redacted] 36-07-15N 120-36-10E	4 field artillery	--	--		25X1
55	Shih-lao-sien CD Post [redacted] 36-05-35N 120-29-40E	4 field artillery	--	--		25X1
56	Shan-tung-tou CD Post [redacted] 36-05-50N 120-26-40E	6 field artillery	--	--		25X1

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Table 1. (Continued)

Item	Name, BE Number, and Coordinates	Weapons	Firing Positions	Tunnel Entrances	Remarks	
57	Nan-chuang CD Site 3 [redacted] 36-00-10N 120-18-25E	Unknown	10	6	4 positions bunker served; 6 positions revetted; artillery not observed	25X1
58	Nan-chuang CD Site [redacted] 35-59-20N 120-17-48E	4 field artillery	8	--	4 positions hardened earth-covered casements	25X1
59	Ling-shan-wei CD Post [redacted] 35-55-50N 120-07-45E	6 field artillery	--	--		25X1
60	Wang-ko-chuang CD Site [redacted] 35-54-07N 120-00-41E	4 field artillery	--	--	Coastal defense support area; firing positions not observed	25X1
61	Yu-ming CD Post [redacted] 35-54-35N 120-10-40E	4 field artillery	--	--		25X1
62	Feng-chia-tuan CD Site [redacted] 35-52-24N 120-02-42E	2 field artillery	--	--	Coastal defense support area; firing positions not observed	25X1
63	Tien-wang-chia Army Bks SE AL 1 [redacted] 35-48-30N 120-00-30E	4 field artillery	--	--	Coastal defense support area; firing positions not observed	25X1
64	Shui-ling-shan Tao CD Site 2 [redacted] 35-46-49N 120-10-09E	Unknown	4	--	Firing positions revetted; weapons system not observed	25X1
65	Shui-ling-shan Tao CD Site West [redacted] 35-45-40N 120-09-20E	4 field artillery	4	--		25X1
66	Yu-chih CD Post [redacted] 35-44-55N 119-59-50E	4 field artillery	--	--		25X1
67	Ta-chu-shan Tsui CD Site Ucon [redacted] 35-42-57N 120-00-07E	Unknown	4	8	Firing positions backed by 4 tunnels; weapons system not observed	25X1
68	Ting-chia-wa CD Site [redacted] 35-38-55N 119-54-10E	2 field artillery	8	8	All firing positions backed by tunnels; 2 firing positions revetted	25X1
69	Po-erh CD Post [redacted] 35-37-50N 119-53-10E	2 field artillery	--	--		25X1
70	Wang-chia-tan CD Post [redacted] 35-37-00N 119-39-55E	6 field artillery	--	--		25X1

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Table 1. (Continued)

Item	Name, BE Number, and Coordinates	Weapons	Firing Positions	Tunnel Entrances	Remarks	
71	Jih-chao CD Artillery Site [redacted] 35-20-20N 119-28-20E	Three 122-mm field artillery	--	--	Coastal defense support area; firing positions not observed	25X1
72	An-tung-wei CD Post Han-cha-ying-tzu [redacted] 35-11-00N 119-21-45E	6 field artillery	--	--		25X1
73	An-tung-wei CD Post [redacted] 35-07-25N 119-18-25E	Three 100-mm field artillery	--	--		25X1
74	Lan-shan-tou CD Site 1 [redacted] 36-06-30N 119-21-30E	4 field artillery	9	6	5 firing positions backed by tunnels on hill 1 nm west	25X1
Totals		248 field artillery pieces	319 firing positions	213 tunnel entrances		

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8. A variety of weapons may be employed at a CD site. As of January 1973 two defensive weapons systems have been identified at CD sites in Shantung Province: field artillery and cruise missiles. The weapons include the 76-mm divisional gun, the 100-mm field gun, the 122-mm field gun, the 122-mm howitzer, the 130-mm field gun, the SAMLET cruise missile, and the CSS-2 STYX cruise missile.

9. The newer CD sites in Shantung Province are capable of handling cruise missiles (Figure 3). The roads, firing positions, and support tunnels are larger than those at the older sites; most of the sites at Shantung are being hardened.

Example of Coastal Defense Complex

10. The defenses on Chang-shan Tao (island) provide an example of the complexity of the CD network in Shantung Province. Dummy tanks have been positioned near support areas and along road systems (Figure 4). On this island (Figure 5), which is only 4 by 2 nautical miles at its widest dimensions, there is an integrated network of defenses which contains 33 firing positions, six support areas, at least 31 adits, and approximately 10 anti-aircraft-heavy-machine-gun/AAA sites. The field artillery firing positions are served by tunnels, trenches, and observation posts. At two sites, firing positions are served by through tunnels which connect to alternate firing positions on opposite slopes (inset E). At least 3,050 meters (10,000 feet) of personnel trenches support and strengthen other defenses on the island. Trenches connect AAA firing positions and provide lines of defense along ridgelines and shorelines.

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REFERENCES

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MAPS OR CHARTS

CIA. Province map of Shantung, Sheet 58652, 2-69 (UNCLASSIFIED)

REQUIREMENT

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